

THERAPEUTIC VR: CASE STUDY SENIOR HOME, GRANVILLE GARDENS

HOW GRANVILLE GARDENS USED VIRTUAL REALITY

Epionia approached Granville Gardens to demonstrate how they are using Virtual Reality technology in the health and wellness sector. Gail was very excited to see the demonstration. She wasn't the only one.

The seniors anticipated the arrival of Epionia, Gail said, noting the Virtual Reality experience was a huge success.

THE OUTCOMES OF USING EPIONIA

Gail was very pleased with the results and can't wait for another chance to bring Virtual Reality into Granville Gardens and even have it permanently. One of the Residents talked with the staff about Virtual Reality for days after the demonstration.

Some of the immediate obvious changes in behaviour Gail notices were:

- ▶ Excitement
- ▶ Relaxation
- ▶ Happiness
- ▶ Positivity

"It gave our Residents a chance to experience something they don't every day. And when you have trouble moving around, with only a few things to occupy your time, the chance to try something new is an amazing opportunity," Gail said.

Gail predicts a day when Virtual Reality is more widely accepted by the healthcare community and applauds Epionia's efforts in bringing a solution to many healthcare issues surrounding the elderly.

BACKGROUND

Virtual Reality (VR) enables a person to experience an artificial world with realistic 3-dimensional depictions of their surroundings, primarily using sight and sound. It is the most immersive experience available and incredibly can convince the human brain that it is somewhere it is really not.

Although it is relatively new outside of army and research center, there are now many applications for this technology including architecture, entertainment, education, and shopping.

But probably the most important field Virtual Reality is being used in is health and wellness. At Epionia, we are using VR to benefit both practitioners and patients in a clinical environment to improve the way we treat people's health both physically and mentally. We use it to reduce pain, anxiety, and depression in all types of situations, and alleviate dementia symptoms for some, shifting away from drug dependency and creating a better, more fulfilling life for all the people we come into contact with.

In this study, we took Virtual Reality technology to a Nursing Care Centre for senior citizens. We wanted to see how the elderly interacted with VR and what impact it had on them. Unfortunately, many seniors face an array of physical health and mental issues. However, we now know technology can help with a lot of those issues.

We went to Granville Gardens Retirement Residence, located in the heart of the Kerrisdale community, to test whether we could engage the seniors, improving their life and health in a holistic fashion.

THE PROBLEM

For seniors who aren't as mobile as they used to be, the world can become very small and stifling. Isolation, depression and boredom can set in. These, along with an array of other mental health issues, are serious problems facing our elderly population that can also lead to a decline of physical wellbeing. In fact, according to a study in the Proceedings of the National Academy of Sciences, both social isolation and loneliness are associated with a higher risk of death in adults aged 52 and older. If we can combat these mental health problems with Virtual Reality, not only will the elderly live longer, but they will be happier as well.

With today's technology, seniors don't have to be limited to the four walls of their senior care, or the restrictiveness of their wheelchair. They can travel to far away places, have experiences that normally wouldn't be possible and expand their horizons. Epionia is at the forefront battling these issues and solving them with innovative solutions. Virtual Reality has almost limitless possibilities in senior care homes, whether it helps learn a new skill, allows virtual travel to a distant country or assists in medical treatments.

Numerous studies have shown Virtual Reality technology has a physical and emotional therapeutic effect on the people who use it. Immersing patients in Virtual Reality stimulate

the brain and reactivate some neuropathways by allowing the participant to think and interact in ways they don't normally do on a daily basis.

In the long run, this means Virtual Reality can help people with various degrees of dementia, depression and anxiety by activating and stimulating parts of their brain that have gone dormant. Long term Virtual Reality may even allow some seniors to regain some brain function which would increase their ability to function and be independent.

RESULT

The seniors at Granville Gardens expressed the Virtual Reality demonstration was different than anything they had experienced at the care centre – or even outside of it.

We had two headsets which the residents took turns trying out, using various settings. The staff noted the seniors became happier, excited and improve their mood during and after the use of the Virtual Reality experience.

“They were livelier than I’ve seen them in a long time,” Gail, said, an ambassador at Granville Gardens. “I’m happy to Epionia for coming in and doing their demonstration. The seniors get to experience something they never would have otherwise.”

Feeling as if they are actually in the surrounding they're interacting with, the seniors remark on how pleasing the experience was and how happy it made them feel. The seniors even said how the demonstration made them happier throughout their day.

CONCLUSION

Technology has allowed us to prolong our lives but until recently health practitioners have given little thought to the implications of what a longer lifespan means to us and society in general.

Virtual Reality is a tool to help treat seniors who suffer from depression, anxiety, boredom and loneliness. Many seniors face a shrinking world, due to declining health and lack of mobility.

With VR, a seniors' general health and mental wellbeing can improve, resulting in a happier more fulfilling life. Specifically, through consistent VR use, it can help battle diseases like depression, anxiety, and even decrease the symptoms of dementias. Virtual Reality can help seniors cope with a sense of isolation and lack of freedom, lessening their dependence on drugs and other healthcare resources.

Epionia is leading the way in Therapeutic VR, and through our studies and work, we hope all seniors will have access to VR technology.

For more information on how Virtual Reality is helping the health and wellness field visit our website at [Epionia.com](https://epionia.com) or contact us at hello@epionia.com.